#### CALIFORNIA COASTAL COMMISSION

SOUTH CENTRAL COAST AREA 89 SOUTH CALIFORNIA ST., SUITE 200 VENTURA, CA 93001 (805) 585-1800

# Th<sub>18</sub>d

Filed: 10/12/07 180th Day: 04/18/08 Staff: Jenn Feinberg Staff Report: 02/15/08 Hearing Date: 03/05/07

### STAFF REPORT: REGULAR CALENDAR

**APPLICATION NO.:** 4-06-116

**APPLICANT:** Los Angeles County Department of Public Works

PROJECT DESCRIPTION: Remediate active slope failure along approximately 320

feet of Newell Road, down slope of the road shoulder. Slope remediation will involve: (1) construction of a 320 linear ft. soldier pile retaining wall 26 ft. high (with a maximum of 10 feet exposed above grade), including tiebacks, a lagging system and 3-ft high cable railing; (2) reconstruction of an approximately 400 ft. long by 18-22 ft. wide roadway; (3) installation of 485 feet of guardrail approximately 2-ft above ground-level; (4) repair of the road shoulder; (5) the placement of 270 tons of asphalt concrete and 100 cu. yds. of crushed aggregate base for road reconstruction; and (7) 1,315 cu. yds. of grading (1,035 cu. yds. of cut, 280 cu yds. of fill) in the area of the

slope failure.

**PROJECT LOCATION:** Newell Road, from its intersection with Corral Canyon

Road to 400 ft. east of with Corral Canyon Road, Santa Monica Mountains; Los Angeles County (APN 4457-013-

053)

**LOCAL APPROVALS** 

RECEIVED: N/A

**MOTION & RESOLUTION: Page 4** 

### **SUMMARY OF STAFF RECOMMENDATION:**

Staff recommends **APPROVAL** of the proposed development with **Three (3) conditions** regarding a revegetation plan, assumption of risk, and color restriction. The proposed project consists of the remediation of an active slope failure along approximately 320 feet of Newell Road. This road provides vehicular and emergency access to the Malibu Bowl residential community.

The project includes reconstruction of the existing developed roadway as well as the construction of a new soldier pile retaining wall and slope recontouring of the outboard slope along Newell Road. The project site is located in a rural reach of the Santa Monica Mountains and is surrounded by chaparral habitat. The project site drains to a tributary leading to Corral Canyon Creek. Corral Canyon Creek, a blue line stream (designated by the USGS), is located approximately 2,100 ft. downstream of the project site. The outboard slope at the project site, though visibly receding down the canyon, contains chaparral habitat as well as disturbed ruderal plant species. Because the project will necessarily include the failed slope area in order to recover the roadway, the project will take place within an environmentally sensitive habitat area.

The County has submitted an engineering and alternatives analysis which asserts that the proposed soldier pile retaining wall is necessary to stabilize the outboard slope of Newell Road in order to prevent further slope failure that could undermine the public roadway. The analysis indicates that project alternatives that were considered include the construction of a concrete retaining wall or excavation and re-compaction of the slope and placement of rip rap over the entire backfilled slope. However, these alternatives can not be practically implemented due to the steepness of the outboard slope and the placement of rip rap over the entire slope would result in significant increased impacts to ESHA. Though the soldier pile wall introduces a large physical structure into the area, this option minimizes the overall footprint of the project into ESHA, revegetates the re-contoured outboard slope, and is designed with faux-rock fascia panels to minimize visual intrusion into the surrounding environment. Staff has reviewed the analysis and concurs that there are no less environmentally damaging alternatives to stabilize the road.

Although this remediation project constitutes repair and maintenance, the method by which this repair and maintenance project is conducted is not exempt under either Section 13252 of the Commission's regulations and Section 30610(d) of the Public Resources Code or the Commission's 1978 Repair and Maintenance Guidelines due to the fact that the development is proposed outside the existing roadway prism and within environmentally sensitive habitat area (ESHA) consisting of chaparral habitat and, thus, requires a coastal development permit. Therefore, since there is no less environmentally damaging alternative available, in order to mitigate for the unavoidable adverse impacts to chaparral habitat, Special Condition One (1) requires the applicant to implement a chaparral habitat revegetation plan that provides for revegetation with native vegetation for all disturbed areas along the outboard slope and all areas of the project site temporarily disturbed by grading and construction activities. The Standard of Review for this application is the policies in Chapter 3 of the Coastal Act. The proposed project, as conditioned, employs a method that is as consistent as possible with the applicable resource protection provisions of the Coastal Act.

### **TABLE OF CONTENTS**

I.	STAFF RECOMMENDATION	4
II.	STANDARD CONDITIONS	4
III.	SPECIAL CONDITIONS	5
	1. Revegetation Plan	5
	2. Assumption of Risk	
	3. Material/Design Specifications	
	4. Removal of Excess Excavated Material	7
IV.	FINDINGS AND DECLARATIONS	7
A	A. PROJECT DESCRIPTION AND PERMIT REQUIREMENTS	7
	1. Project Description	
	2. Past Commission Actions	8
	3. Coastal Permit Required for Repair and Maintenance within ESHA	9
В	8. ENVIRONMENTALLY SENSITIVE HABITAT AND WATER QUALITY	9
	1. Ecosystem Context of the Habitats of the Santa Monica Mountains	
	2. Major Habitats within the Santa Monica Mountains	15
	3. Chaparral	16
	4. Application of the Section 30240 ESHA Protection Policy	18
C	C. HAZARDS AND GEOLOGIC STABILITY	22
$\Gamma$	O. VISUAL RESOURCES	24
E	LOCAL COASTAL PROGRAM	25
F	. CEQA	25

#### **EXHIBITS**

**Exhibit 1. Vicinity Map** 

**Exhibit 2. Parcel Map** 

Exhibit 3. Site Plan

Exhibit 4. Wall Elevation

Exhibit 5. Wall Detail

SUBSTANTIVE FILE DOCUMENTS: "Newell Road – From Coral Canyon Road to 360 Feet East of Corral Canyon Road, Engineer's Report," County of Los Angeles Department of Public Works, February 27, 2007; "Los Angeles County Department of Public Works Biological Reconnaissance Survey, Newell Road Repair Project 360 ft. east of Corral Canyon Road, Malibu, California. Task Order EP06-004," URS Corporation, January 17, 2006; "Repair, Maintenance and Utility Hook-Up Exclusions From Permit Requirements", adopted by the Commission on Sept. 5, 1978; National Park Service, 2000 Draft general management plan & environmental impact statement, Santa Monica Mountains National Recreation Area – California; California Resources Agency. 2001 Missing Linkages: Restoring Connectivity to the California Landscape; California Wilderness Coalition, Calif. Dept of Parks & Recreation, USGS, San Diego Zoo and The Nature Conservancy. Available

at: http://www.calwild.org/pubs/reports/linkages/index.htm; September 2002 staff report for the Malibu LCP; Sauvajot, R. M., E. C. York, T. K. Fuller, H. Sharon Kim, D. A. Kamradt and R. K. Wayne, 2000, Distribution and status of carnivores in the Santa Monica Mountains, California: Preliminary results from radio telemetry and remote camera surveys; Franklin, J. 1997; Forest Service Southern California Mapping Project, Santa Monica Mountains National Recreation Area, Task 11 Description and Results, Final Report; Biological Resources Assessment of the Proposed Santa Monica Mountains Significant Ecological Area. Nov. 2000. Los Angeles Co., Dept. of Regional Planning.]

### I. STAFF RECOMMENDATION

MOTION: I move that the Commission approve Coastal Development

Permit No. 4-06-116 pursuant to the staff recommendation.

#### STAFF RECOMMENDATION OF APPROVAL:

Staff recommends a **YES** vote. Passage of this motion will result in approval of the permit as conditioned and adoption of the following resolution and findings. The motion passes only by affirmative vote of a majority of the Commissioners present.

#### **RESOLUTION TO APPROVE THE PERMIT:**

The Commission hereby approves a coastal development permit for the proposed development and adopts the findings set forth below on grounds that the development as conditioned will be in conformity with the policies of Chapter 3 of the Coastal Act and will not prejudice the ability of the local government having jurisdiction over the area to prepare a Local Coastal Program conforming to the provisions of Chapter 3. Approval of the permit complies with the California Environmental Quality Act because either 1) feasible mitigation measures and/or alternatives have been incorporated to substantially lessen any significant adverse effects of the development on the environment, or 2) there are no further feasible mitigation measures or alternatives that would substantially lessen any significant adverse impacts of the development on the environment.

#### II. STANDARD CONDITIONS

- 1. <u>Notice of Receipt and Acknowledgment</u>. The permit is not valid and development shall not commence until a copy of the permit, signed by the permittee or authorized agent, acknowledging receipt of the permit and acceptance of the terms and conditions, is returned to the Commission office.
- **Expiration.** If development has not commenced, the permit will expire two years from the date on which the Commission voted on the application. Development shall be pursued in a diligent manner and completed in a reasonable period of time. Application for extension of the permit must be made prior to the expiration date.

- **1.** <u>Interpretation.</u> Any questions of intent or interpretation of any condition will be resolved by the Executive Director or the Commission.
- **4.** Assignment. The permit may be assigned to any qualified person, provided assignee files with the Commission an affidavit accepting all terms and conditions of the permit.
- **Terms and Conditions Run with the Land.** These terms and conditions shall be perpetual, and it is the intention of the Commission and the permittee to bind all future owners and possessors of the subject property to the terms and conditions.

#### III. SPECIAL CONDITIONS

#### 1. Revegetation Plan

Prior to issuance of this Coastal Development Permit, the applicant shall submit, for the review and approval of the Executive Director, a detailed Revegetation Plan and Monitoring Program, prepared by a biologist or environmental resource specialist with qualifications acceptable to the Executive Director, for all disturbed areas along the outboard slope and all areas of the project site temporarily disturbed by grading and construction activities. Within 60 days of the issuance of this coastal development permit, the applicant shall commence implementation of the approved Revegetation Plan. The Executive Director may grant additional time for good cause. The plans shall identify the species, extent, and location of all plant materials to be removed or planted and shall incorporate the following criteria:

#### a. Technical Specifications

The Revegetation Plan shall provide for the restoration of chaparral habitat in the project area with native plant species that are appropriate for southern mixed chaparral to cover all areas along the outboard slope and where chaparral vegetation has been temporarily disturbed or removed due to construction activities shall be replanted with native plant species that are appropriate for both chaparral habitat in the same general location. The revegetation area shall be delineated on a site plan. All invasive and non-native plant species shall be removed from the revegetation area.

The plan shall include detailed documentation of conditions on site prior to the approved construction activity (including photographs taken from pre-designated sites annotated to a copy of the site plans) and specify restoration goals and specific performance standards to judge the success of the restoration effort.

The plan shall also provide information on removal methods for exotic species, salvage of existing vegetation, revegetation methods and vegetation maintenance. The plan shall further include details regarding the types, sizes, and location of plants to be placed within the mitigation area. Only native plant species appropriate for a southern mixed chaparral and which are endemic to the Santa Monica Mountains shall be used, as listed by the California Native Plant Society - Santa Monica Mountains Chapter in

their document entitled Recommended List of Plants for Landscaping in the Santa Monica Mountains, dated February 5, 1996. All native plant species shall be of local genetic stock. No plant species listed as problematic and/or invasive by the California Native Plant Society, the California Invasive Plant Council, or by the State of California shall be employed or allowed to naturalize or persist on the site. No plant species listed as a 'noxious weed' by the State of California or the U.S. Federal Government shall be utilized or maintained within the property. Site restoration shall be deemed successful if the revegetation of native plant species on site is adequate to provide 90% coverage by the end of the five (5) year monitoring period and is able to survive without additional outside inputs, such as supplemental irrigation. The plan shall also include a detailed description of the process, materials, and methods to be used to meet the approved goals and performance standards and specify the preferable time of year to carry out restoration activities and describe the interim supplemental watering requirements that will be necessary.

#### b. Monitoring Program

A monitoring program shall be implemented to monitor the project for compliance with the specified guidelines and performance standards. The applicant shall submit, upon completion of the initial planting, a written report prepared by a qualified resource specialist, for the review and approval of the Executive Director, documenting the completion of the initial planting/revegetation work. This report shall also include photographs taken from pre-designated sites (annotated to a copy of the site plans) documenting the completion of the initial planting/revegetation work.

Five years from the date of issuance of this coastal development permit, the applicant shall submit for the review and approval of the Executive Director, a Revegetation Monitoring Report, prepared by a qualified biologist or Resource Specialist, which certifies whether the on-site restoration is in conformance with the restoration plan approved pursuant to this Special Condition. The monitoring report shall include photographic documentation of plant species and plant coverage.

If the monitoring report indicates the vegetation and restoration is not in conformance with or has failed to meet the performance standards specified in the revegetation plan approved pursuant to this permit, the applicant, or successors in interest, shall submit a revised or supplemental restoration plan for the review and approval of the Executive Director and shall implement the approved version of the plan. The revised restoration plan must be prepared by a qualified biologist or Resource Specialist and shall specify measures to remediate those portions of the original plan that have failed or are not in conformance with the original approved plan.

#### 2. Assumption of Risk

A. By acceptance of this permit, the applicant acknowledges and agrees (i) that the site may be subject to hazards from erosion, landslide, and slope failure; (ii) to assume the risks to the applicant and the property that is the subject of this

permit of injury and damage from such hazards in connection with this permitted development; (iii) to unconditionally waive any claim of damage or liability against the Commission, its officers, agents, and employees for injury or damage from such hazards; and (iv) to indemnify and hold harmless the Commission, its officers, agents, and employees with respect to the Commission's approval of the project against any and all liability, claims, demands, damages, costs (including costs and fees incurred in defense of such claims), expenses, and amounts paid in settlement arising from any injury or damage due to such hazards.

B. Prior to the issuance of the coastal development permit, the applicant shall submit a written agreement, in a form and content acceptable to the Executive Director, incorporating all of the above terms of this condition.

#### 3. Material/Design Specifications

Prior to issuance of this Coastal Development Permit, the applicant shall submit detailed plans, for the review and approval of the Executive Director, which show that <u>all</u> exposed surfaces of the approved soldier pile retaining wall, shall be designed to include, or mimic, the native materials and appearance (including color and texture) of the natural environment (such as the appearance of rock facing).

#### 4. Removal of Excess Excavated Material

Prior to issuance of this Coastal Development Permit, the applicant shall provide evidence to the Executive Director of the location of the disposal site for all excess excavated material from the site. If the disposal site is located in the Coastal Zone, the disposal site must have a valid coastal development permit for the disposal of fill material. If the disposal site does not have a coastal permit, such a permit will be required prior to the disposal of material.

#### IV. FINDINGS AND DECLARATIONS

The Commission hereby finds and declares:

#### A. PROJECT DESCRIPTION AND PERMIT REQUIREMENTS

#### 1. Project Description

The proposed project consists of the remediation of an active slope failure along approximately 320 feet of Newell Road, downslope of the road shoulder. Slope remediation requires: (1) construction of a 320 linear ft. soldier pile retaining wall (26 ft. high with a maximum of 10 feet exposed above grade), including tiebacks, a lagging system and 3-ft high cable railing; (2) reconstruction of an approximately 400 ft. long by 18-22 ft. wide roadway; (3) installation of 485 feet of guardrail approximately 2-ft above ground-level; (4) repair of the road shoulder; (5) the placement of 270 tons of asphalt

concrete and 100 cu. yds. of crushed aggregate base for road reconstruction; and (7) 1,315 cu. yds. of grading (1,035 cu. yds. of cut, 280 cu yds. of fill) in the area of the slope failure (**Exhibits 3-5**).

The subject site is located on Newell Road, from the intersection of Newell Road and Corral Canyon Road to 400 ft. east of Corral Canyon Road, within and adjacent to the residential development known as the Malibu Bowl small lot subdivision, within the Santa Monica Mountains, Los Angeles County (**Exhibits 1 and 2**). The project crosses one privately-owned parcel. The property owner of this parcel has granted permission for L.A. County Public Works to access the subject property and complete the proposed project. The proposed project is located along a 320-foot section of Newell Road which descends to a tributary leading to Corral Canyon Creek. Corral Canyon Creek, a significant blue line stream, is located approximately 2,100 ft. downslope of the project site, with drainage from the project site traversing approximately 800 ft. south of the project site to join an unnamed tributary which then extends approximately 1,300 feet east to reach Corral Canyon Creek. Existing residences are located to the north and east within approximately 50-200 feet of the project site.

The County has submitted an engineering and alternatives analysis which asserts that the proposed soldier pile retaining wall is necessary to stabilize the outboard slope of Newell Road in order to prevent further slope failure that could undermine the public roadway. The analysis indicates that project alternatives that were considered include the construction of a concrete retaining wall or excavation and re-compaction of the slope and placement of rip rap over the entire backfilled slope. However, these alternatives can not be practically implemented due to the steepness of the outboard slope and the placement of rip rap over the entire slope would result in significant increased impacts to ESHA. Though the soldier pile wall introduces a large physical structure into the area, this option minimizes the overall footprint of the project into ESHA, revegetates the re-contoured outboard slope, and is designed with faux-rock fascia panels to minimize visual intrusion into the surrounding environment. Staff has reviewed the analysis and concurs that there are no less environmentally damaging alternatives to stabilize the road.

#### 2. Past Commission Actions

On June 14, 2007, the Commission approved CDP 4-06-115, which was issued to the Los Angeles County Department of Public Works for slope remediation work on Newell Road, at the intersection of Newell and Fairside Roads, just east of the slope remediation work proposed as part of this permit application. The work authorized in CDP 4-06-115 included (1) construction of a 313 linear ft., 25 ft. high (with a maximum of 10 feet exposed above grade), soldier pile retaining wall including tiebacks, a lagging system and 3-ft high cable railing; (2) reconstruction of an approximately 313 ft. long by 18-20 ft. wide roadway; (3) installation of 350 feet of guardrail approximately 2-ft above-ground-level; (4) repair of the road shoulder; (5) removal of 35 linear feet of rail and timber fence; (6) 225 tons of asphalt concrete and 120 cu. yds. of crushed aggregate

base for the road reconstruction; and (7) 100 cu. yds. of cut grading in the area of the slope failure.

#### 3. Coastal Permit Required for Repair and Maintenance within ESHA

The proposed work is designed to maintain the existing road in a safe condition. The project constitutes repair and maintenance work. The Commission has expressly recognized, since 1978, certain types of repair and maintenance work related to roads as exempt from permit requirements pursuant to Section 13252 of the Commission's regulations and Section 30610(d) of the Public Resource Code. See California Public Resources Code ("PRC") Section 30610(d) and the "Repair, Maintenance and Utility Hook-Up Exclusions From Permit Requirements" (adopted by the Commission on Sept. 5, 1978) (hereafter, "R&M Exclusions") Appendix I, § 3 (referring to "installation of slope protection devices, minor drainage facilities"). However, the exemptions provided by the above referenced sections and the R&M Exclusions are limited. Accordingly, California Code of Regulations, Title 14 ("14 CCR"), Section 13252(a) lists extraordinary methods of repair and maintenance that do still require a permit. Among those methods is any repair or maintenance "located in an environmentally sensitive habitat area." 14 CCR § 13252(a)(3). Since this project would occur within such an area, the method by which this project is conducted is not exempt and a permit is required. In addition, further review of the R&M Exclusions Guidelines confirms that this proposed repair and maintenance is not exempt from permit requirements based on that document because the proposed development is located outside the "roadway prism" or the roadway property or easement.

Similarly, 14 CCR Section 13252(a) states that "activities specifically described in the [R&M Exclusions guidance document that] will have a risk of substantial adverse impact on . . . environmentally sensitive habitat area" are not exempt based on that document and may require a coastal development permit, pursuant to the normal application of section 13252. Thus, in this case, although the project is a repair and maintenance project, since the work is to be performed within an ESHA, Section 13252(a)'s limits on the repair and maintenance exemption do apply, and this project does require a permit to ensure that the method employed is as consistent as possible with the Chapter 3 policies of the Coastal Act. Moreover, this project involves excavation, and the R&M Exclusions guidance document expressly states that a permit is required "for excavation . . . outside of the roadway prism" Id. at § II.A., page 2. Therefore, a coastal development permit is required for this project.

#### **B. ENVIRONMENTALLY SENSITIVE HABITAT AND WATER QUALITY**

Section 30231 states:

The biological productivity and the quality of coastal waters, streams, wetlands, estuaries, and lakes appropriate to maintain optimum populations of marine organisms and for the protection of human health shall be maintained and, where feasible, restored through, among other means,

minimizing adverse effects of waste water discharges and entrainment, controlling runoff, preventing depletion of ground water supplies and substantial interference with surface water flow, encouraging waste water reclamation, maintaining natural vegetation buffer areas that protect riparian habitats, and minimizing alteration of natural streams.

#### Section 30240 states:

- (a) Environmentally sensitive habitat areas shall be protected against any significant disruption of habitat values, and only uses dependent on such resources shall be allowed within such areas.
- (b) Development in areas adjacent to environmentally sensitive habitat areas and parks and recreation areas shall be sited and designed to prevent impacts which would significantly degrade such areas, and shall be compatible with the continuance of such habitat areas.

Section 30107.5 of the Coastal Act, defines an environmentally sensitive area as:

"Environmentally sensitive area" means any area in which plant or animal life or their habitats are either rare or especially valuable because of their special nature or role in an ecosystem and which could be easily disturbed or degraded by human activities and developments.

Sections 30230 and 30231 of the Coastal Act require that the biological productivity and the quality of coastal waters and streams be maintained and, where feasible, restored through among other means, minimizing adverse effects of waste water discharge and entrainment, controlling runoff, preventing depletion of ground water supplies and substantial interference with surface water flows, maintaining natural buffer areas that protect riparian habitats, and minimizing alteration of natural streams. In addition, Section 30240 of the Coastal Act states that environmentally sensitive habitat areas must be protected against disruption of habitat values.

The proposed project consists of the remediation of an active slope failure along approximately 320 feet of the Newell Road. The proposed project is located along the south-eastern downslope side of Newell Road. The entire length of the project is approximately 400 feet along the roadway which includes road reconstruction and soldier pile wall construction. The proposed project is located along a section of Newell Road that descends to a tributary leading to Corral Canyon Creek. Corral Canyon Creek, a blue line stream (as designated by the USGS), is located approximately 2,100 ft. downslope of the project site, with drainage from the project site traversing approximately 800 ft. south of the project site to join an unnamed tributary which then extends approximately 1,300 feet east to reach Corral Canyon Creek.

The applicant submitted a biology report entitled, "Los Angeles County Department of Public Works Biological Reconnaissance Survey, Newell Road Repair Project 360 feet east of Corral Canyon Road, Malibu, California. Task Order EP06-044," prepared by URS Corporation, dated January 17, 2006. This report confirmed that the project site

and surrounding biological resources consist of southern mixed chaparral as well as ruderal vegetation associated with disturbance and ornamental plantings associated with residential developments.

For habitats in the Santa Monica Mountains, such as chaparral, there are three site-specific tests to determine whether an area is ESHA because of its especially valuable role in the ecosystem. First, is the habitat properly identified, for example as chaparral? The requisite information for this test generally should be provided by a site-specific biological assessment. Second, is the habitat largely undeveloped and otherwise relatively pristine? Third, is the habitat part of a large, contiguous block of relatively pristine native vegetation? For those habitats that are absolutely rare or that support individual rare species, it is not necessary to find that they are relatively pristine, and are neither isolated nor fragmented.

As noted above, the Coastal Act provides a definition of "environmentally sensitive area" as: "Any area in which plant or animal life or their habitats are either rare or especially valuable because of their special nature or role in an ecosystem and which could be easily disturbed or degraded by human activities and developments" (Section 30107.5).

There are three important elements to the definition of ESHA. First, a geographic area can be designated ESHA either because of the presence of individual species of plants or animals or because of the presence of a particular habitat. Second, in order for an area to be designated as ESHA, the species or habitat must be either rare or it must be especially valuable. Finally, the area must be easily disturbed or degraded by human activities.

The first test of ESHA is whether a habitat or species is rare. Rarity can take several forms, each of which is important. Within the Santa Monica Mountains, rare species and habitats often fall within one of two common categories. Many rare species or habitats are globally rare, but locally abundant. They have suffered severe historical declines in overall abundance and currently are reduced to a small fraction of their original range, but where present may occur in relatively large numbers or cover large local areas. This is probably the most common form of rarity for both species and habitats in California and is characteristic of coastal sage scrub, for example. Some other habitats are geographically widespread, but occur everywhere in low abundance. California's native perennial grasslands fall within this category.

A second test for ESHA is whether a habitat or species is especially valuable. Areas may be valuable because of their "special nature," such as being an unusually pristine example of a habitat type, containing an unusual mix of species, supporting species at the edge of their range, or containing species with extreme variation. For example, reproducing populations of valley oaks are not only increasingly rare, but their southernmost occurrence is in the Santa Monica Mountains. Generally, however, habitats or species are considered valuable because of their special "role in the ecosystem." For example, many areas within the Santa Monica Mountains may meet this test because they provide habitat for endangered species, protect water quality,

provide essential corridors linking one sensitive habitat to another, or provide critical ecological linkages such as the provision of pollinators or crucial trophic connections. Of course, all species play a role in their ecosystem that is arguably "special." However, the Coastal Act requires that this role be "especially valuable." This test is met for relatively pristine areas that are integral parts of the Santa Monica Mountains Mediterranean ecosystem because of the demonstrably rare and extraordinarily special nature of that ecosystem as detailed below.

Finally, ESHAs are limited to those areas that could be easily disturbed or degraded by human activities and developments. Within the Santa Monica Mountains, as in most areas of southern California affected by urbanization, all natural habitats are in grave danger of direct loss or significant degradation as a result of many factors related to anthropogenic changes.

The applicant proposes to remediate an active slope failure along approximately 320 feet of the Newell Road and repave a portion of the roadway. Slope remediation includes: (1) construction of a 320 linear ft. soldier pile retaining wall including tiebacks, a lagging system and 3-ft high cable railing; (2) reconstruction of an approximately 400 ft. long by 18-22 ft. wide roadway; (3) installation of 485 feet of guardrail approximately 2-ft above ground-level; (4) repair of the road shoulder; (5) the placement of 270 tons of asphalt concrete and 100 cu. yds. of crushed aggregate base for road reconstruction; and (7) 1,315 cu. yds. of grading (1,035 cu. yds. of cut, 280 cu yds. of fill) in the area of the slope failure.

### 1. Ecosystem Context of the Habitats of the Santa Monica Mountains

The Santa Monica Mountains comprise the largest, most pristine, and ecologically complex example of a Mediterranean ecosystem in coastal southern California. California's coastal sage scrub, chaparral, oak woodlands, and associated riparian areas have analogues in just a few areas of the world with similar climate. Mediterranean ecosystems with their wet winters and warm dry summers are only found in five localities (the Mediterranean coast, California, Chile, South Africa, and south and southwest Australia). Throughout the world, this ecosystem with its specially adapted vegetation and wildlife has suffered severe loss and degradation from human development. Worldwide, only 18 percent of the Mediterranean community type remains undisturbed<sup>1</sup>. However, within the Santa Monica Mountains, this ecosystem is remarkably intact despite the fact that it is closely surrounded by some 17 million people. For example, the 150,000 acres of the Santa Monica Mountains National Recreation Area, which encompasses most of the Santa Monica Mountains, was estimated to be 90 percent free of development in 2000<sup>2</sup>. Therefore, this relatively pristine area is both large and mostly unfragmented, which fulfills a fundamental tenet of

\_

<sup>&</sup>lt;sup>1</sup> National Park Service. 2000. Draft general management plan & environmental impact statement. Santa Monica Mountains National Recreation Area – California.

<sup>&</sup>lt;sup>2</sup> Ibid.

conservation biology<sup>3</sup>. The need for large contiguous areas of natural habitat in order to maintain critical ecological processes has been emphasized by many conservation biologists<sup>4</sup>.

In addition to being a large single expanse of land, the Santa Monica Mountains ecosystem is still connected, albeit somewhat tenuously, to adjacent, more inland ecosystems<sup>5</sup>. Connectivity among habitats within an ecosystem and connectivity among ecosystems is very important for the preservation of species and ecosystem integrity. In a recent statewide report, the California Resources Agency<sup>6</sup> identified wildlife corridors and habitat connectivity as the top conservation priority. In a letter to Governor Gray Davis, sixty leading environmental scientists have endorsed the conclusions of that report<sup>7</sup>. The chief of natural resources at the California Department of Parks and Recreation has identified the Santa Monica Mountains as an area where maintaining connectivity is particularly important<sup>8</sup>.

The species most directly affected by large scale connectivity are those that require large areas or a variety of habitats, e.g., gray fox, cougar, bobcat, badger, steelhead trout, and mule deer<sup>9</sup>. Large terrestrial predators are particularly good indicators of habitat connectivity and of the general health of the ecosystem<sup>10</sup>. Recent studies show

<sup>&</sup>lt;sup>3</sup> Harris, L. D. 1988. Edge effects and conservation of biotic diversity. Conserv. Biol. 330-332. Soule, M. E, D. T. Bolger, A. C. Alberts, J. Wright, M. Sorice and S. Hill. 1988. Reconstructed dynamics of rapid extinctions of chaparral-requiring birds in urban habitat islands. Conserv. Biol. 2: 75-92. Yahner, R. H. 1988. Changes in wildlife communities near edges. Conserv. Biol. 2:333-339. Murphy, D. D. 1989. Conservation and confusion: Wrong species, wrong scale, wrong conclusions. Conservation Biol. 3:82-84.

<sup>&</sup>lt;sup>4</sup> Crooks, K. 2000. Mammalian carnivores as target species for conservation in Southern California. p. 105-112 *in*: Keeley, J. E., M. Baer-Keeley and C. J. Fotheringham (eds), 2<sup>nd</sup> Interface Between Ecology and Land Development in California, U.S. Geological Survey Open-File Report 00-62. Sauvajot, R. M., E. C. York, T. K. Fuller, H. Sharon Kim, D. A. Kamradt and R. K. Wayne. 2000. Distribution and status of carnivores in the Santa Monica Mountains, California: Preliminary results from radio telemetry and remote camera surveys. p 113-123 *in*: Keeley, J. E., M. Baer-Keeley and C. J. Fotheringham (eds), 2<sup>nd</sup> Interface Between Ecology and Land Development in California, U.S. Geological Survey Open-File Report 00-62. Beier, P. and R. F. Noss. 1998. Do habitat corridors provide connectivity? Conserv. Biol. 12:1241-1252. Beier, P. 1996. Metapopulation models, tenacious tracking and cougar conservation. *In*: Metapopulations and Wildlife Conservation, ed. D. R. McCullough. Island Press, Covelo, California, 429p.

<sup>&</sup>lt;sup>5</sup> The SMM area is linked to larger natural inland areas to the north through two narrow corridors: 1) the Conejo Grade connection at the west end of the Mountains and 2) the Simi Hills connection in the central region of the SMM (from Malibu Creek State Park to the Santa Susanna Mountains).

<sup>&</sup>lt;sup>6</sup> California Resources Agency. 2001. Missing Linkages: Restoring Connectivity to the California Landscape. California Wilderness Coalition, Calif. Dept of Parks & Recreation, USGS, San Diego Zoo and The Nature Conservancy. Available at: http://www.calwild.org/pubs/reports/linkages/index.htm

 $<sup>^{7}</sup>$  Letters received and included in the September 2002 staff report for the Malibu LCP.

<sup>&</sup>lt;sup>8</sup> Schoch, D. 2001. Survey lists 300 pathways as vital to state wildlife. Los Angeles Times. August 7, 2001.

<sup>&</sup>lt;sup>9</sup> Martin, G. 2001. Linking habitat areas called vital for survival of state's wildlife Scientists map main migration corridors. San Francisco Chronicle, August 7, 2001.

<sup>&</sup>lt;sup>10</sup> Noss, R. F., H. B. Quigley, M. G. Hornocker, T. Merrill and P. C. Paquet. 1996. Conservation biology and carnivore conservation in the Rocky Mountains. Conerv. Biol. 10: 949-963. Noss, R. F. 1995. Maintaining ecological integrity in representative reserve networks. World Wildlife Fund Canada.

that the mountain lion, or cougar, is the most sensitive indicator species of habitat fragmentation, followed by the spotted skunk and the bobcat<sup>11</sup>. Sightings of cougars in both inland and coastal areas of the Santa Monica Mountains<sup>12</sup> demonstrate their continued presence. Like the "canary in the mineshaft," an indicator species like this is good evidence that habitat connectivity and large scale ecological function remains in the Santa Monica Mountains ecosystem.

The habitat integrity and connectivity that is still evident within the Santa Monica Mountains is extremely important to maintain, because both theory and experiments over 75 years in ecology confirm that large spatially connected habitats tend to be more stable and have less frequent extinctions than habitats without extended spatial structure<sup>13</sup>. Beyond simply destabilizing the ecosystem, fragmentation and disturbance can even cause unexpected and irreversible changes to new and completely different kinds of ecosystems (habitat conversion)<sup>14</sup>.

As a result of the pristine nature of large areas of the Santa Monica Mountains and the existence of large, unfragmented and interconnected blocks of habitat, this ecosystem continues to support an extremely diverse flora and fauna. The observed diversity is probably a function of the diversity of physical habitats. The Santa Monica Mountains have the greatest geological diversity of all major mountain ranges within the transverse range province. According to the National Park Service, the Santa Monica Mountains contain 40 separate watersheds and over 170 major streams with 49 coastal outlets<sup>15</sup>. These streams are somewhat unique along the California coast because of their topographic setting. As a "transverse" range, the Santa Monica Mountains are oriented in an east-west direction. As a result, the south-facing riparian habitats have more

\_

<sup>&</sup>lt;sup>11</sup> Sauvajot, R. M., E. C. York, T. K. Fuller, H. Sharon Kim, D. A. Kamradt and R. K. Wayne. 2000. Distribution and status of carnivores in the Santa Monica Mountains, California: Preliminary results from radio telemetry and remote camera surveys. p 113-123 in: Keeley, J. E., M. Baer-Keeley and C. J. Fotheringham (eds), 2nd Interface Between Ecology and Land Development in California, U.S. Geological Survey Open-File Report 00-62. Beier, P. 1996. Metapopulation models, tenacious tracking and cougar conservation. In: Metapopulations and Wildlife Conservation, ed. D. R. McCullough. Island Press, Covelo, California, 429p.

<sup>&</sup>lt;sup>12</sup> Recent sightings of mountain lions include: Temescal Canyon (pers. com., Peter Brown, Facilities Manager, Calvary Church), Topanga Canyon (pers. com., Marti Witter, NPS), Encinal and Trancas Canyons (pers. com., Pat Healy), Stump Ranch Research Center (pers. com., Dr. Robert Wayne, Dept. of Biology, UCLA). In May of 2002, the NPS *photographed* a mountain lion at a trip camera on the Back Bone Trail near Castro Crest – Seth Riley, Eric York and Dr. Ray Sauvajot, National Park Service, SMMNRA.

<sup>&</sup>lt;sup>13</sup> Gause, G. F. 1934. The struggle for existence. Balitmore, William and Wilkins 163 p. (also reprinted by Hafner, N.Y. 1964). Gause, G. F., N. P. Smaragdova and A. A. Witt. 1936. Further studies of interaction between predators and their prey. J. Anim. Ecol. 5:1-18. Huffaker, C. B. 1958. Experimental studies on predation: dispersion factors and predator-prey oscillations. Hilgardia 27:343-383. Luckinbill, L. S. 1973. Coexistence in laboratory populations of *Paramecium aurelia* and its predator *Didinium nasutum*. Ecology 54:1320-1327. Allen, J. C., C. C. Brewster and D. H. Slone. 2001. Spatially explicit ecological models: A spatial convolution approach. Chaos, Solitons and Fractals. 12:333-347.

Scheffer, M., S. Carpenter, J. A. Foley, C. Folke and B. Walker. 2001. Catastrophic shifts in ecosystems. Nature 413:591-596.

<sup>&</sup>lt;sup>15</sup> NPS. 2000. op.cit.

variable sun exposure than the east-west riparian corridors of other sections of the coast. This creates a more diverse moisture environment and contributes to the higher biodiversity of the region. The many different physical habitats of the Santa Monica Mountains support at least 17 native vegetation types<sup>16</sup> including the following habitats considered sensitive by the California Department of Fish and Game: native perennial grassland, coastal sage scrub, red-shank chaparral, valley oak woodland, walnut woodland, southern willow scrub, southern cottonwood-willow riparian forest, sycamore-alder woodland, oak riparian forest, coastal salt marsh, and freshwater marsh. Over 400 species of birds, 35 species of reptiles and amphibians, and more than 40 species of mammals have been documented in this diverse ecosystem. More than 80 sensitive species of plants and animals (listed, proposed for listing, or species of concern) are known to occur or have the potential to occur within the Santa Monica Mountains Mediterranean ecosystem.

The Santa Monica Mountains are also important in a larger regional context. Several recent studies have concluded that the area of southern California that includes the Santa Monica Mountains is among the most sensitive in the world in terms of the number of rare endemic species, endangered species and habitat loss. These studies have designated the area to be a local hot-spot of endangerment in need of special protection<sup>17</sup>.

Therefore, the Commission finds that the Santa Monica Mountains ecosystem is itself rare and especially valuable because of its special nature as the largest, most pristine, physically complex, and biologically diverse example of a Mediterranean ecosystem in coastal southern California. The Commission further finds that because of the rare and special nature of the Santa Monica Mountains ecosystem, the ecosystem roles of substantially intact areas of the constituent plant communities discussed below are "especially valuable" under the Coastal Act.

#### 2. Major Habitats within the Santa Monica Mountains

The most recent vegetation map that is available for the Santa Monica Mountains is the map that was produced for the National Park Service in the mid-1990s using 1993 satellite imagery supplemented with color and color infrared aerial imagery from 1984, 1988, and 1994 and field review<sup>18</sup>. The minimum mapping unit was 5 acres. For that

<sup>&</sup>lt;sup>16</sup> From the NPS report (2000 op. cit.) that is based on the older Holland system of subjective classification. The data-driven system of Sawyer and Keeler-Wolf results in a much larger number of distinct "alliances" or vegetation types.

Myers, N. 1990. The biodiversity challenge: Expanded hot-spots analysis. Environmentalist 10:243-256. Myers, N., R. A. Mittermeier, C. G. Mittermeier, G. A. B. da Fonseca and J. A. Kent. 2000. Biodiversity hot-spots for conservation priorities. Nature 403:853-858. Dobson, A. P., J. P. Rodriguez, W. M. Roberts and D. S. Wilcove. 1997. Geographic distribution of endangered species in the United States. Science 275:550-553.

<sup>&</sup>lt;sup>18</sup> Franklin, J. 1997. Forest Service Southern California Mapping Project, Santa Monica Mountains National Recreation Area, Task 11 Description and Results, Final Report. June 13, 1997, Dept. of Geography, San Diego State University, USFS Contract No. 53-91S8-3-TM45.

map, the vegetation was mapped in very broad categories, generally following a vegetation classification scheme developed by Holland<sup>19</sup>. Because of the mapping methods used the degree of plant community complexity in the landscape is not represented. For example, the various types of "ceanothus chaparral" that have been documented were lumped under one vegetation type referred to as "northern mixed chaparral." Dr. Todd Keeler-Wolf of the California Department of Fish and Game is currently conducting a more detailed, quantitative vegetation survey of the Santa Monica Mountains.

The National Park Service map can be used to characterize broadly the types of plant communities present. The main generic plant communities present in the Santa Monica Mountains<sup>20</sup> are: coastal sage scrub, chaparral, riparian woodland, coast live oak woodland, and grasslands.

#### 3. Chaparral

Chaparral is a shrub community within the Santa Monica Mountain Mediterranean ecosystem. This is a generic category of vegetation. Chaparral species have deep roots (tens of feet) and hard waxy leaves, adaptations to drought that increase water supply and decrease water loss at the leaf surface. Some chaparral species cope more effectively with drought conditions than do desert plants<sup>21</sup>. Chaparral plants vary from about one to four meters tall and form dense, intertwining stands with nearly 100 percent ground cover. As a result, there are few herbaceous species present in mature stands. Chaparral is well adapted to fire. Many species regenerate mainly by crown sprouting; others rely on seeds which are stimulated to germinate by the heat and ash from fires. Over 100 evergreen shrubs may be found in chaparral<sup>22</sup>. On average, chaparral is found in wetter habitats than coastal sage scrub, being more common at higher elevations and on north facing slopes.

The broad category "northern mixed chaparral" is the major type of chaparral shown in the National Park Service map of the Santa Monica Mountains. However, northern mixed chaparral can be variously dominated by chamise, scrub oak or one of several species of manzanita or by ceanothus. In addition, it commonly contains woody vines and large shrubs such as mountain mahogany, toyon, hollyleaf redberry, and sugarbush<sup>23</sup>. The rare red shank chaparral plant community also occurs in the Santa

<sup>&</sup>lt;sup>19</sup> Holland R. F. 1986. Preliminary Descriptions of the Terrestrial Natural Communities of California. State of California, The Resources Agency, Dept. of Fish and Game, Natural Heritage Division, Sacramento, CA. 95814.

National Park Service. 2000. <u>Draft</u>: General Management Plan & Environmental Impact Statement, Santa Monica Mountains National Recreation Area, US Dept. of Interior, National Park Service, December 2000. (Fig. 11 in this document.)

<sup>&</sup>lt;sup>21</sup> Dr. Stephen Davis, Pepperdine University. Presentation at the CCC workshop on the significance of native habitats in the Santa Monica Mountains. June 13, 2002.

Keely, J.E. and S.C. Keeley. Chaparral. Pages 166-207 in M.G. Barbour and W.D. Billings, eds. North American Terrestrial Vegetation. New York, Cambridge University Press.
Billings, eds. Pages 166-207 in M.G. Barbour and W.D. Billings, eds. North American Terrestrial Vegetation. New York, Cambridge University Press.

Monica Mountains. Although included within the category "northern mixed chaparral" in the vegetation map, several types of "ceanothus chaparral" are reported in the Santa Monica Mountains. Ceanothus chaparral occurs on stable slopes and ridges, and may be dominated by bigpod ceanothus, buck brush ceanothus, hoaryleaf ceanothus, or greenbark ceanothus. In addition to ceanothus, other species that are usually present in varying amounts are chamise, black sage, holly-leaf redberry, sugarbush, and coast golden bush<sup>24</sup>.

Several sensitive plant species that occur in the chaparral of the Santa Monica Mountains area are: Santa Susana tarplant, Lyon's pentachaeta, marcescent dudleya, Santa Monica Mountains dudleya, Braunton's milk vetch and salt spring checkerbloom<sup>25</sup>. Several occurring or potentially occurring sensitive animal species in chaparral from the area are: Santa Monica shieldback katydid, western spadefoot toad, silvery legless lizard, San Bernardino ring-neck snake, San Diego mountain kingsnake, coast patch-nosed snake, sharp-shinned hawk, southern California rufous-crowned sparrow, Bell's sparrow, yellow warbler, pallid bat, long-legged myotis bat, western mastiff bat, and San Diego desert woodrat.<sup>26</sup>

Coastal sage scrub and chaparral are the predominant generic community types of the Santa Monica Mountains and provide the living matrix within which rarer habitats like riparian woodlands exist. These two shrub communities share many important ecosystem roles. Like coastal sage scrub, chaparral within the Santa Monica Mountains provides critical linkages among riparian corridors, provides essential habitat for species that require several habitat types during the course of their life histories, provides essential habitat for sensitive species, and stabilizes steep slopes and reduces erosion, thereby protecting the water quality of coastal streams.

Many species of animals in Mediterranean habitats characteristically move among several plant communities during their daily activities, and many are reliant on different communities either seasonally or during different stages of their life cycle. The importance of an intact mosaic of coastal sage scrub, chaparral, and riparian community types is perhaps most critical for birds. However, the same principles apply to other taxonomic groups. For example, whereas coastal sage scrub supports a higher diversity of native ant species than chaparral, chaparral habitat is necessary for the coast horned lizard, an ant specialist<sup>27</sup>. Maintaining this interconnectedness of habitats is an extremely important ecosystem role of chaparral in the Santa Monica Mountains.

<sup>25</sup> Biological Resources Assessment of the Proposed Santa Monica Mountains Significant Ecological Area. Nov. 2000. Los Angeles Co., Dept. of Regional Planning, 320 West Temple St., Rm. 1383, Los Angeles, CA 90012.
<sup>26</sup> Ibid.

<sup>&</sup>lt;sup>24</sup> Ibid.

<sup>&</sup>lt;sup>27</sup> A.V. Suarez. Ants and lizards in coastal sage scrub and chaparral. A presentation at the CCC workshop on the significance of native habitats in the Santa Monica Mountains. June 13, 2002.

Chaparral is also remarkably adapted to control erosion, especially on steep slopes. The root systems of chaparral plants are very deep, extending far below the surface and penetrating the bedrock below<sup>28</sup>, so chaparral literally holds the hillsides together and prevents slippage.<sup>29</sup> In addition, the direct soil erosion from precipitation is also greatly reduced by 1) water interception on the leaves and above ground foliage and plant structures, and 2) slowing the runoff of water across the soil surface and providing greater soil infiltration. Chaparral plants are extremely resistant to drought, which enables them to persist on steep slopes even during long periods of adverse conditions. Many other species die under such conditions, leaving the slopes unprotected when rains return. Since chaparral plants recover rapidly from fire, they quickly re-exert their ground stabilizing influence following burns. The effectiveness of chaparral for erosion control after fire increases rapidly with time<sup>30</sup>. Thus, the erosion from a 2-inch rain-day event drops from 5 yd<sup>3</sup>/acre of soil one year after a fire to 1 yd<sup>3</sup>/acre after 4 years.<sup>31</sup>

Therefore, because of its important roles in the functioning of the Santa Monica Mountains Mediterranean ecosystem, and its extreme vulnerability to development, chaparral within the Santa Monica Mountains meets the definition of ESHA under the Coastal Act.

#### 4. Application of the Section 30240 ESHA Protection Policy

In this case, the proposed project includes construction of a 320-ft.-long soldier pile wall and reconstruction of a portion of Newell Road. The proposed project is partially located within a chaparral plant community. As discussed in greater detail above, the Commission finds that chaparral habitat, such as the native vegetation located on the subject site, provide important habitat for wildlife. In past permit actions, the Commission has found that new development within chaparral habitat areas, such as the proposed project, results in potential adverse effects to chaparral habitat and downstream riparian habitat and ultimately marine resources from increased erosion, contaminated storm runoff, disturbance to wildlife, and loss of chaparral plant and animal habitat. The Coastal Act further requires that environmentally sensitive habitat areas, such as the subject site, be maintained, enhanced, and where feasible, restored to protect coastal water quality downstream.

<sup>29</sup> Radtke, K. 1983. *Living more safely in the chaparral-urban interface*. General Technical Report PSW-67. U.S. Department of Agriculture, Forest Service, Pacific Southwest Research Station, Berkeley, California. 51 pp.

<sup>&</sup>lt;sup>28</sup> Helmers, H., J.S. Horton, G. Juhren and J. O'Keefe. 1955. Root systems of some chaparral plants in southern California. Ecology 36(4):667-678. Kummerow, J. and W. Jow. 1977. Root systems of chaparral shrubs. Oecologia 29:163-177.

<sup>&</sup>lt;sup>30</sup> Kittredge, J. 1973. Forest influences — the effects of woody vegetation on climate, water, and soil. Dover Publications, New York. 394 pp. Longcore, T and C. Rich. 2002. Protection of environmentally sensitive habitat areas in proposed local coastal plan for the Santa Monica Mountains. (Table 1). The Urban Wildlands Group, Inc., P.O. Box 24020 Los Angeles, CA 90024. Vicars, M. (ed.) 1999. FireSmart: protecting your community from wildfire. Partners in Protection, Edmonton, Alberta.

<sup>31</sup> Ibid.

Coastal Act Section 30240 requires that development in areas adjacent to environmentally sensitive habitat areas be sited and designed to prevent impacts which would significantly degrade such areas and shall be compatible with the continuance of such habitat areas. Given that the project addresses a slope failure in a fixed location, the siting of such development to avoid impacts to ESHA is necessarily constrained. In this case, the slope failure itself is located within ESHA. As a result, it is not possible to relocate the proposed development in a manner that would avoid or provide a buffer from the sensitive habitat areas. Therefore, it is essential to consider design options that would reduce impacts to ESHA, consistent with Coastal Act Section 30240. As discussed below, there are no other feasible alternatives (such as rebuilding the previous slope configuration) to the proposed project that would result in less adverse impacts than the proposed project.

To assist in the determination of whether a project is consistent with Sections 30230, 30231, and 30240 of the Coastal Act, the Commission has, in past coastal development permit actions for new development in the Santa Monica Mountains, looked to the certified Malibu/Santa Monica Mountains Land Use Plan (LUP) for guidance. The 1986 LUP has been found to be consistent with the Coastal Act and provides specific standards for development within the Santa Monica Mountains. In its findings regarding the certification of the Malibu/Santa Monica Mountains LUP, the Commission emphasized the importance placed by the Coastal Act on protection of sensitive environmental resources finding that:

Environmentally sensitive habitat areas (ESHAs) shall be protected against significant disruption of habitat values, and only uses dependent on such resources shall be allowed within such areas. Residential use shall not be considered a resource dependent use.

Specifically, Policy 68 of the LUP, in concert with the Coastal Act, limits development within ESHA areas. In addition, Policy 82 of the LUP, in concert with the Coastal Act, provides that grading shall be minimized to ensure that the potential negative effects of runoff and erosion on watershed and streams is minimized. Further, Policies 84 and 94, in concert with the Coastal Act, provide that disturbed areas shall be revegetated with native plant species within environmentally sensitive habitat areas and significant watersheds. LUP Policy 94 states:

Cut and fill slopes should be stabilized with planting at the completion of final grading. In Environmentally Sensitive Habitat Areas and Significant Watersheds, planting should be of native plant species using acceptable planting procedures, consistent with fire safety requirements. Such planting should be adequate to provide 90% coverage within 90 days, and should be repeated if necessary to provide such coverage. This requirement should apply to all disturbed soils. Jute netting or other stabilization techniques may be utilized as temporary methods. ...

In addition, Section 30231 of the Coastal Act specifically provides that the quality of coastal waters and streams shall be maintained and restored whenever feasible. As noted above, the project site includes chaparral habitat that meets the first and second

tests of ESHA as the habitat is rare and is especially valuable as an unfragmented expanse of ESHA. This ESHA also meets the third test as it is located in an area that could be easily disturbed or degraded by human activities and developments. Within the Santa Monica Mountains, as in most areas of southern California affected by urbanization, all natural habitats are in grave danger of direct loss or significant degradation as a result of many factors related to anthropogenic changes.

The proposed project is designed to repair the existing public road that was previously damaged due to storm activity. The project constitutes necessary repair and maintenance work. The Commission has expressly recognized, since 1978, certain types of road-related repair and maintenance work as exempt from permit requirements pursuant Public Resources Code ("PRC") Section 30610(d). See "Repair, Maintenance and Utility Hook-Up Exclusions From Permit Requirements" (adopted by the Commission on Sept. 5, 1978) (hereafter, "R&M Exclusions") Appendix I, § 3 (referring to "installation of slope protection devices, minor drainage facilities"). However, the exemptions provided by the above referenced section of the Public Resources Code and the R&M Exclusions are limited. Accordingly, California Code of Regulations, Title 14 ("14 CCR"), Section 13252(a) lists extraordinary methods of repair and maintenance that do still require a permit. Among those methods is any repair or maintenance "located in an environmentally sensitive habitat area." 14 CCR § 13252(a)(3). Since this project would occur within such an area, the method by which this project is conducted is not exempt, and a permit is therefore required.

In addition, further review of the R&M Exclusions Guidelines confirms that this proposed repair and maintenance is not exempt from permit requirements under that document either, because the proposed development is located outside the "roadway prism" or the roadway property or easement. The majority of this project is located on private property. Similarly, Section 13252(a) of the Commission's regulations states that "activities specifically described in the [R&M Exclusions guidance document that] will have a risk of substantial adverse impact on ... environmentally sensitive habitat area" are not exempt based on that document and may require a coastal development permit, pursuant to the normal application of section 13252.

Thus, although the project is a repair and maintenance project, since the work is to be performed within an ESHA, Section 13252(a)'s limits on the repair and maintenance exemption do apply, and this project does require a permit to ensure that the method employed is as consistent as possible with the Chapter 3 policies of the Coastal Act. Moreover, this project involves excavation, and the R&M Exclusions guidance document expressly states that a permit is required "for excavation . . . outside of the roadway prism" <u>Id.</u> at § II.A., page 2. Therefore, a coastal development permit is required for this project.

Therefore, in this case, although the Commission finds that the proposed repair of the existing public roadway and its supporting slopes is generally consistent with the types of repair and maintenance activities that are allowed under Coastal Act and the R&M Guidelines for public projects, in this case, a coastal development permit is required.

In addition, the County has submitted an engineering and alternatives analysis which asserts that the proposed soldier pile retaining wall is necessary to stabilize the outboard slope of Newell Road in order to prevent further slope failure that could undermine the public roadway. The analysis indicates that project alternatives that were considered include the construction of a concrete retaining wall or excavation and recompaction of the slope and placement of rip rap over the entire backfilled slope. However, these alternatives can not be practically implemented due to the steepness of the outboard slope and the placement of rip rap over the entire slope would result in significant increased impacts to ESHA. Though the soldier pile wall introduces a large physical structure into the area, this option minimizes the overall footprint of the project into ESHA, revegetates the re-contoured outboard slope, and is designed with faux-rock fascia panels to minimize visual intrusion into the surrounding environment.

Staff has reviewed the engineering and alternatives analysis submitted by the County and concurs that there are no less environmentally damaging alternatives to stabilize the road. The alternative involving the excavation, re-compaction, and placement of rip rap along the entire backfilled slope would result in greater adverse impacts to environmentally sensitive habitat due to the larger areas of disturbance associated with this alternative. Thus, the Commission finds that the proposed project has the least impact to ESHA, and there are no other feasible alternatives (such as rebuilding the previous slope configuration) to the proposed project that would reduce impacts than the proposed project.

Although the proposed project is the environmentally preferred alternative, it would still result in some unavoidable adverse impacts to ESHA on site. In past permit actions, the Commission has found that in order to ensure that repair work is as consistent as possible with the above referenced resource protection policies of both the Coastal Act and LUP, all chaparral habitat areas on site that will be disturbed as a result of proposed development should be revegetated and restored. Therefore, the Commission finds that Special Condition One (1) is necessary to ensure that adverse effects to the chaparral habitat from increased erosion and sedimentation are Specifically, Special Condition 1 requires that, prior to issuance of the permit, the applicant shall submit, for the review and approval of the Executive Director, a detailed Revegetation Plan and Monitoring Program, prepared by a biologist or environmental resource specialist with qualifications acceptable to the Executive Director, for all disturbed areas along the outboard slope and all areas of the project site temporarily disturbed by grading and construction activities. Within 60 days of the issuance of this coastal development permit, the applicant shall commence implementation of the approved chaparral habitat revegetation plan. The Executive Director may grant additional time for good cause.

**Special Condition One (1)** requires the Revegetation Plan to identify the species, extent, and location of all plant materials to be removed or planted. Special Condition 1 further stipulates that all planted materials must be native plant species that are appropriate for southern mixed chaparral. Additionally, all invasive and non-native plant

species shall be removed from the project area, including the disturbed outboard slope. In addition, Special Condition 1 also requires the applicant to implement a five year monitoring program to ensure the success of the replanting.

The slope remediation work involves 1,315 cu. yds. of cut grading and 280 cu. yds of fill. To ensure that the excess cut material does not have direct or indirect impacts on ESHA or water quality, either through direct placement or through erosion of excess material from the project site, **Special Condition Four (4)** has been included to require that the applicant provide evidence of the location of the disposal site of all excess excavated material from the site.

In conclusion, as discussed in detail above, the proposed development will be approved within ESHA in order to repair a public roadway. Siting and design alternatives have been considered in order to identify the alternative that can avoid and minimize impacts to ESHA to the greatest extent feasible. The proposed development is the alternative that will minimize impacts. In addition, restoration of all disturbed areas, as described above, has been required that will further reduce impacts to ESHA and water quality.

The Commission therefore finds that the project, as conditioned, will protect ESHA against any significant disruption of habitat values, consistent with Section 30240 of the Coastal Act. The project, as conditioned, will maintain the biological productivity and quality of coastal waters by minimizing adverse effects of waste water, controlling runoff, and minimizing erosion. Therefore, the Commission finds that, as conditioned, the project is consistent with Section 30231 of the Coastal Act.

#### C. HAZARDS AND GEOLOGIC STABILITY

Coastal Act Section 30253 states in part:

New development shall:

- (1) Minimize risks to life and property in areas of high geologic, flood, and fire hazard.
- (2) Assure stability and structural integrity, and neither create nor contribute significantly to erosion, geologic instability, or destruction of the site or surrounding area or in any way require the construction of protective devices that would substantially alter natural landforms along bluffs and cliffs.

The proposed development is located in the Santa Monica Mountains, an area which is generally considered to be subject to an unusually high amount of natural hazards. Geologic hazards common to the Santa Monica Mountains include landslides, erosion, and flooding. In addition, fire is an inherent threat to the indigenous chaparral community of the coastal mountains. Wild fires often denude hillsides in the Santa Monica Mountains of all existing vegetation, thereby contributing to an increased potential for erosion and landslides on property.

The Los Angeles County Department of Public Works (LACDPW) proposes a slope remediation which includes: (1) construction of a 320 linear ft. soldier pile retaining wall including tiebacks, a lagging system and 3-ft high cable railing; (2) reconstruction of an approximately 400 ft. long by 18-22 ft. wide roadway; (3) installation of 485 feet of guardrail approximately 2-ft above ground-level; (4) repair of the road shoulder; (5) the placement of 270 tons of asphalt concrete and 100 cu. yds. of crushed aggregate base for road reconstruction; and (7) 1,315 cu. yds. of grading (1,035 cu. yds. of cut, 280 cu yds. of fill) in the area of the slope failure.

During the January 2005 winter storm season, the roadway embankment slope along this 320 foot long section of Newell Road was subject to significant erosion as a result of increased amounts of stormwater runoff. The purpose of the proposed remediation is to maintain the public's ability to use these roads for vehicular access and provide for emergency services/access to the developed residential community of the Malibu Bowl subdivision.

The Commission notes that the proposed development, although necessary to remediate a hazardous eroding slope condition, will still not eliminate the potential for erosion of the steep slope on the subject site. The Commission finds that minimization of site erosion will add to the stability of the site. Erosion can best be minimized by requiring the applicant to plant all disturbed areas of the site with native plants compatible with the surrounding chaparral habitat. Further, in past permit actions, the Commission has found that invasive and non-native plant species are typically characterized as having a shallow root structure in comparison with their high surface/foliage weight and/or require a greater amount of irrigation and maintenance than native vegetation. The Commission notes that non-native and invasive plant species with high surface/foliage weight and shallow root structures do not serve to stabilize steep slopes, such as the slopes on the subject site, and that such vegetation results in potential adverse effects to the geologic stability of the project site. comparison, the Commission finds that native plant species are typically characterized not only by a well developed and extensive root structure in comparison to their surface/foliage weight but also by their low irrigation and maintenance requirements. Therefore, in order to ensure the stability and geotechnical safety of the site, **Special** Condition One (1) specifically requires that all proposed disturbed areas on subject site be stabilized with native vegetation appropriate for chaparral habitat.

The proposed project, as conditioned to ensure that the disturbed slopes on site are revegetated with native vegetation, has been designed to ensure slope stability on site to the maximum extent feasible. However, the Coastal Act recognizes that certain development projects located in geologically hazardous areas, such as the subject site, still involve the taking of some risk. Coastal Act policies require the Commission to establish the appropriate degree of risk acceptable for the proposed development and to determine who should assume the risk. When development in areas of identified hazards is proposed, the Commission considers the hazard associated with the project site and the potential cost to the public, as well as the individual's right to use his property. As such, the Commission finds that due to the foreseen possibility of erosion,

landslide, and slope failure, the applicant shall assume these risks as a condition of approval. Therefore, **Special Condition Two (2)** requires the applicant to waive any claim of liability against the Commission for damage to life or property which may occur as a result of the permitted development. The applicant's assumption of risk, will show that the applicant is aware of and appreciates the nature of the hazards which exist on the site, and which may adversely affect the stability or safety of the proposed development.

Therefore, for the reasons discussed above, the Commission finds that the proposed project, as conditioned, is consistent with Section 30253 of the Coastal Act.

### **D. VISUAL RESOURCES**

Section 30251 of the Coastal Act states that:

The scenic and visual qualities of coastal areas shall be considered and protected as a resource of public importance. Permitted development shall be sited and designed to protect views to and along the ocean and scenic coastal areas, to minimize the alteration of natural land forms, to be visually compatible with the character of surrounding areas, and, where feasible, to restore and enhance visual quality in visually degraded areas. New development in highly scenic areas such as those designated in the California Coastline Preservation and Recreation Plan prepared by the Department of Parks and Recreation and by local government shall be subordinated to the character of its setting.

The proposed project includes the construction of a 320 linear ft. soldier pile retaining wall, which will be a maximum of 10-ft.-high exposed above grade. The retaining wall will include tiebacks, a lagging system and 3-ft high cable railing. The project further includes the reconstruction of an approximately 400 ft. long by 18-22 ft. wide roadway; installation of 485 feet of guardrail approximately 2-ft above ground-level; repair of the road shoulder; 270 tons of asphalt concrete and 100 cu. yds. of crushed aggregate base for the road reconstruction; and 1,315 cu. yds. of grading (1,035 cu. yds. of cut, 289 cu yds. of fill) in the area of the slope failure.

The Commission notes that the soldier pile retaining wall, road reconstruction, slope recontouring, and associated grading will serve to increase the structural stability of the roadway on the subject site and ensure public safety. Although the proposed retaining wall will be 26 ft. high, the majority of the wall will actually be below grade. No more than approximately 10 ft. of wall will be exposed above grade and visible from public viewing areas, including Corral Canyon Road immediately west of the project site. However, the Commission also notes that portions of the wall will still be highly visible from sections of Corral Canyon Road and will be more urban in appearance and will be less consistent with the rural nature of the area surrounding the project site than previously existed. Therefore, in order to ensure that any adverse effects to public views resulting from the proposed development are minimized, **Special Condition Three (3)** requires that the surface of the proposed soldier pile retaining wall be

designed to include, or mimic, the color and texture of native materials and appearance of the natural environment (such as the appearance of rock facing). Therefore, for the reasons discussed above, the Commission finds that the proposed development, as proposed, will not result in any adverse effects to public views and is consistent with Section 30251 of the Coastal Act.

#### E. LOCAL COASTAL PROGRAM

Section 30604 of the Coastal Act states:

a) Prior to certification of the local coastal program, a coastal development permit shall be issued if the issuing agency, or the commission on appeal, finds that the proposed development is in conformity with the provisions of Chapter 3 (commencing with Section 30200) of this division and that the permitted development will not prejudice the ability of the local government to prepare a local program that is in conformity with the provisions of Chapter 3 (commencing with Section 30200).

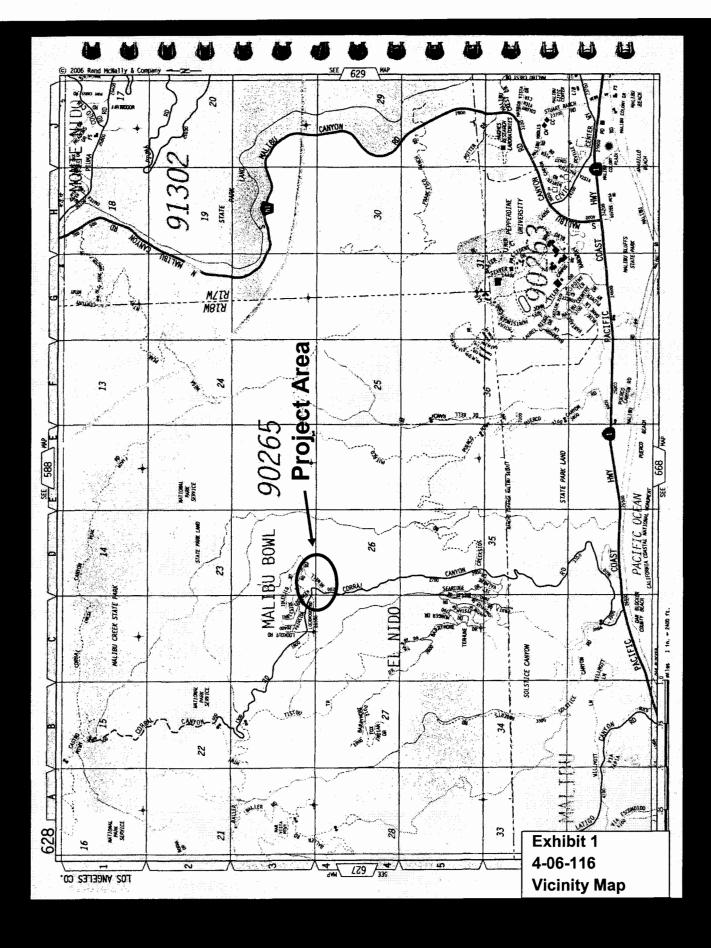
Section 30604(a) of the Coastal Act provides that the Commission shall issue a Coastal Development Permit only if the project will not prejudice the ability of the local government having jurisdiction to prepare a Local Coastal Program which conforms with Chapter 3 policies of the Coastal Act. The preceding sections provide findings that the proposed project will be in conformity with the provisions of Chapter 3 if certain conditions are incorporated into the project and are accepted by the applicant. As conditioned, the proposed development will not create adverse impacts and is found to be consistent with the applicable policies contained in Chapter 3. Therefore, the Commission finds that approval of the proposed development, as conditioned, will not prejudice the County of Los Angeles' ability to prepare a Local Coastal Program for this area which is also consistent with the policies of Chapter 3 of the Coastal Act, as required by Section 30604(a).

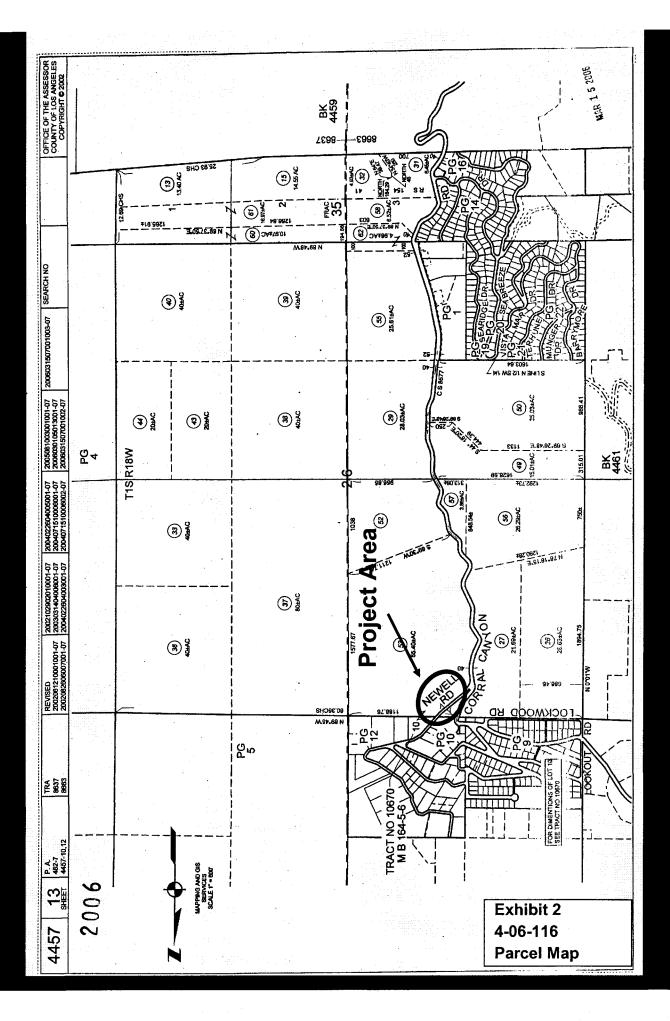
### F. CEQA

Section 13096(a) of the Commission's administrative regulations requires Commission approval of a Coastal Development Permit application to be supported by a finding showing the application, as conditioned by any conditions of approval, to be consistent with any applicable requirements of the California Environmental Quality Act (CEQA). Section 21080.5(d)(2)(A) of CEQA prohibits a proposed development from being approved if there are feasible alternatives or feasible mitigation measures available which would substantially lessen any significant adverse effect that the activity may have on the environment.

The County of Los Angeles found that the proposed project was statutorily exempt pursuant to Section 21080 (b) (3) of the California Environmental Quality Act on August 28, 2006.

The Commission incorporates its findings on Coastal Act consistency at this point as if set forth in full. These findings address and respond to all public comments regarding potential significant adverse environmental effects of the project that were received prior to preparation of the staff report. As discussed above, the proposed development, as conditioned, is consistent with the policies of the Coastal Act. Feasible mitigation measures which will minimize all adverse environmental effects have been required as special conditions and all reasonable alternatives were considered to the proposed project which was found to be the environmentally preferred alternative. As conditioned, there are no feasible alternatives or feasible mitigation measures available, beyond those required, which would substantially lessen any significant adverse impact that the activity may have on the environment. Therefore, the Commission finds that the proposed project, as conditioned to mitigate the identified impacts, can be found to be consistent with the requirements of the Coastal Act to conform to CEQA.





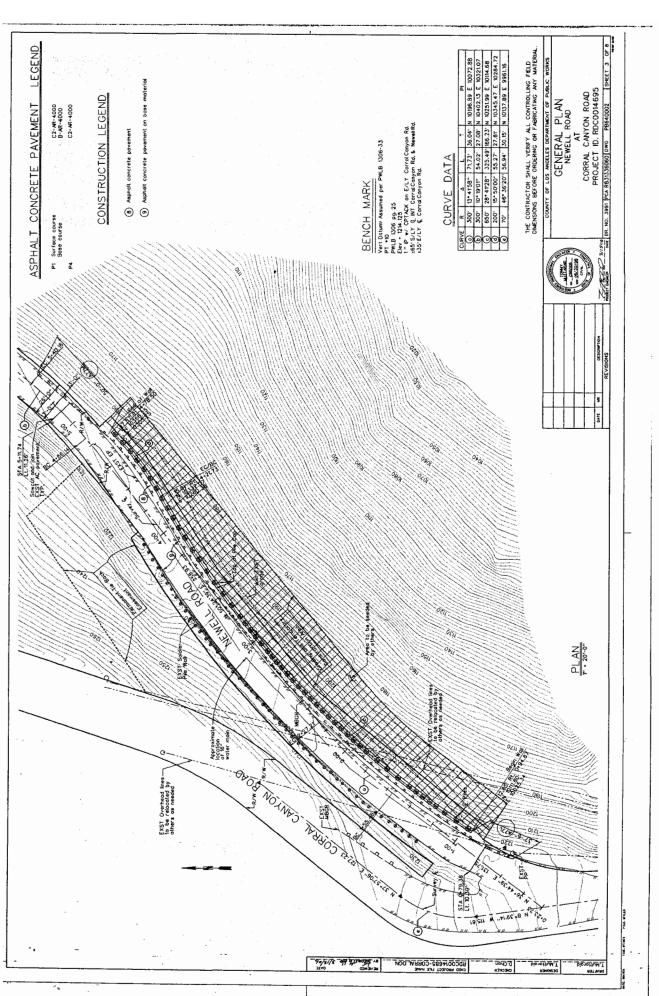


Exhibit 3 4-06-116 Site Plan

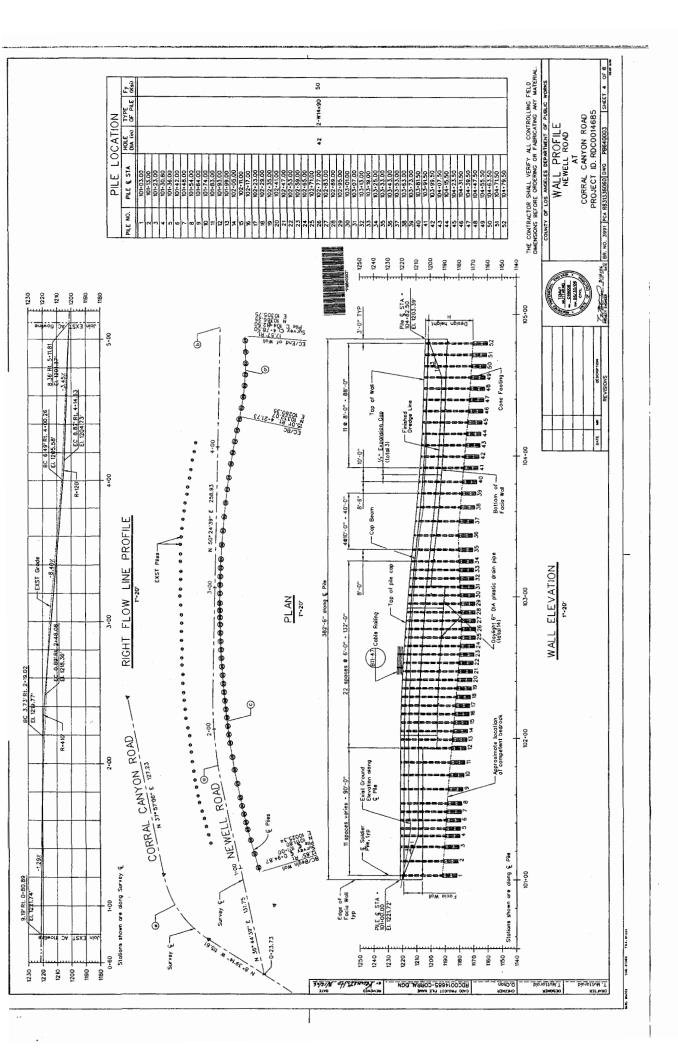


Exhibit 4 4-06-116 Wall Elevation

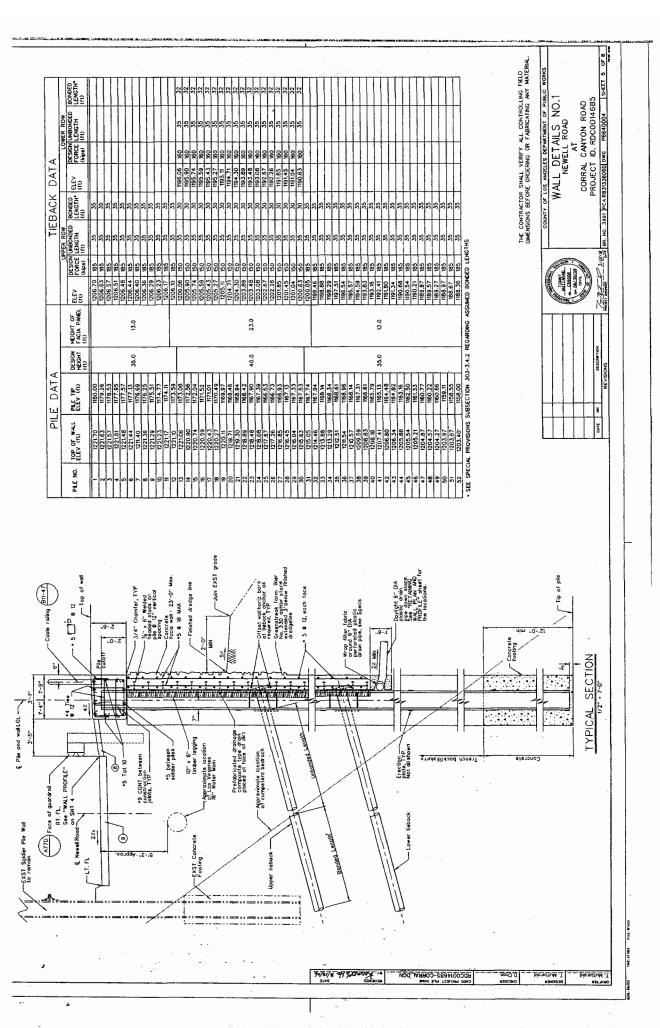


Exhibit 5 4-06-116 Wall Detail